

Application No. 09/819,304
Reply to the Office Action of December 19, 2005

Remarks

This application has been reviewed in light of the Office Action dated December 19, 2005. Claims 1-40 are pending in this application and have been amended to define still more clearly what Applicants regard as their invention. Claims 1 and 21 are in independent form. Favorable reconsideration is respectfully requested.

Claim 13 has been objected on the grounds that the equation presented therein failed to particularly define each of the symbols used in the claim. Claim 13 has been amended to place it in a condition for allowance . Applicants respectfully request that the objection be withdrawn.

Claims 1-40 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Michaud et al., U.S. Patent No. 6,003,018 (Michaud) in view of Rickets et al., U.S. Patent Application Publication No. 20050137963 (Rickets). Applicants respectfully traverse this rejection.

The Examiner cites Michaud as teaching a method and program code comprising: a) assigning a covariance matrix composed of a variance for each of said instruments and a correlation matrix to said universe; b) removing one of said instruments from said universe; c) calculating a residual variance for each of said instruments remaining in said universe; d) calculating a residual variance for said universe based on said residual variance for each of said instruments and said correlation matrix; e) reinstating said instrument into said universe; f) repeating steps b-e for each instrument in the universe; f) repeating steps b-e for each instrument in the universe; g) inserting into said index said one of said instruments for which said residual

variance of said universe is minimized; h) eliminating from said universe said one of said instruments for which said residual variance of said universe is minimized; and i) repeating steps b-h until said index is formed. The Examiner, however, admits that Michaud “fails to teach an index per se,” but argues that Rickets demonstrates selection of a representative index. Therefore, the Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time Applicants’ invention was made to combine the teachings of Michaud, relating to selection of a portfolio of instruments based on residual variance, with the teachings of Rickets, related to constructing a market index from statistical information.

The present invention, as described in amended Claim 1, recites a method for forming an index, the index including a subset of instruments selected from a universe of N instruments, the method comprising the steps of: a) assigning a covariance matrix composed of a variance for each of the instruments and a correlation matrix to the universe; b) removing one of the instruments from the universe; c) calculating a residual variance for each of the instruments remaining in the universe; d) calculating a residual variance for the universe based on the residual variance for each of the instruments and the correlation matrix; e) reinstating the instrument into the universe; f) repeating steps b-e for each instrument in the universe; g) inserting into the index one of the instruments for which the residual variance of the universe is minimized; h) eliminating from the universe the one of the instruments for which the residual variance of the universe is minimized; and i) repeating steps b-h until the index is formed.

Rickets, alone or in combination with Michaud does not teach or suggest, for example, a method for forming a fixed income index that is representative of a universe of instruments and

that can accurately be priced in a timely and replicable manner. Instead, Rickets teaches a system and method for providing stock purchase indices that measure the participation rates of who is buying and selling stocks rather than the value of what is being bought or sold. Moreover, the Examiner admits that Michaud does not teach an index *per se* (see p. 3 of the Office Action). In the present application, Applicant submits that the Examiner has failed to make out a *prima facie* case of obviousness; accordingly, the Examiner's rejection under § 103 is not supported and it is respectfully requested that it be withdrawn. Applicants respectfully submit that the claims are patentable over the prior art.

Independent claim 21 recites features that are similar in many respects to claim 1 and therefore also patentable for substantially the same reasons as set forth above for independent claim 1.

A review of the art of record has failed to reveal anything that, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as applied against the independent claims herein. Therefore, those claims are respectfully submitted to be patentable over the art of record. It is respectfully requested that the Examiner withdraw the claim rejections and allow the claims.

The other rejected claims in this application depend upon one or another of amended independent claims, discussed above and, therefore, are submitted to be patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, individual consideration or reconsideration, as the case may be, of the patentability of each claim on its own merits is respectfully requested.

Application No. 09/819,304
Reply to the Office Action of December 19, 2005

CONCLUSION

For the foregoing reasons, allowance of this application, as amended, is courteously urged.

Claims 1-40 are now pending and believed to be in condition for allowance. Applicant respectfully requests that all pending claims be allowed.

Early and favorable action is respectfully requested.

Please apply any credits or excess charges to our deposit account number 50-0521.

Respectfully submitted,

Date: May 19, 2006

Chandana Rao
Chandana R. Rao
Reg. No. 52, 150

Clifford Chance US LLP
31 West 52nd Street
New York, NY 10019-6131
Telephone: (212) 878-3164